

Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending December 14, 2013

Prepared by the Office of Infectious Disease Epidemiology and Outbreak Response Infectious Disease Bureau – Prevention and Health Promotion Administration Maryland Department of Health and Mental Hygiene

The data presented in this document are provisional and subject to change as additional reports come in.

SUMMARY

During the week ending December 14, 2013, influenza-like illness (ILI) intensity in Maryland was MINIMAL and there was LOCAL geographic spread of influenza. Eleven influenza-associated hospitalizations were reported. Forty specimens tested positive for influenza by PCR at the DHMH Laboratories Administration. Two outbreaks of respiratory disease were reported. Most ILI indicators decreased or held steady compared to the previous week, while the proportion of specimens testing positive at the state lab and sentinel labs increased. Overall, influenza activity remains low across, but more states are reporting increased influenza activity.

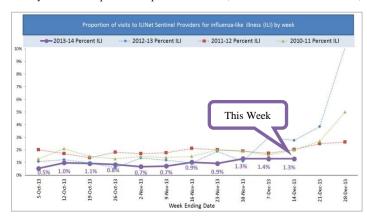
Click here to visit our influenza surveillance web page

ILI Intensity Levels			
✓ Minimal			
Low			
Moderate			
High			

Influenza Geographic Spread
No Activity
Sporadic
✓ Local
Regional
Widespread

ILINet Sentinel Providers

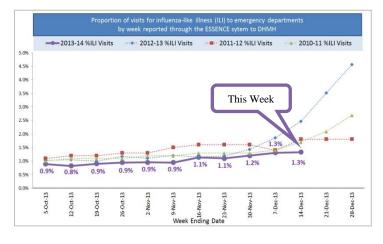
Twenty-one sentinel providers reported a total of 7,615 visits this week. Of those, 99 (1.3%) were visits for ILI. This is below the Maryland baseline of 2.0%.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	24 (24%)	29 (23%)	287 (26%)
Age 5-24	42 (42%)	51 (41%)	479 (44%)
Age 25-49	25 (25%)	34 (27%)	244 (22%)
Age 50-64	8 (8%)	10 (8%)	62 (6%)
Age ≥ 65	0 (0%)	1 (1%)	20 (2%)
Total ILI Visits	99 (100%)	125 (100%)	1092 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 40,106 visits this week through the ESSENCE surveillance system. Of those, 534 (1.3%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	196 (37%)	183 (31%)	1616 (32%)
Age 5-24	128 (24%)	149 (26%)	1428 (29%)
Age 25-49	143 (27%)	161 (28%)	1287 (26%)
Age 50-64	49 (9%)	62 (11%)	451 (9%)
Age ≥ 65	18 (3%)	26 (4%)	200 (4%)
Unknown	0 (0%)	3 (1%)	10 (<1%)
Total ILI Visits	534 (100%)	584 (100%)	4992 (100%)

Other states' influenza information:

Delaware http://dhss.delaware.gov/dph/epi/influenzahome.html

District of Columbia http://doh.dc.gov/service/influenza

Pennsylvania http://www.portal.state.pa.us/portal/server.pt/community/influenza (flu)/14161

 Virginia
 http://www.vdh.state.va.us/Epidemiology/Surveillance/Influenza/

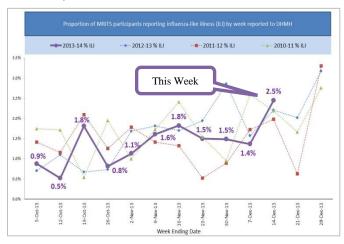
 West Virginia
 http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

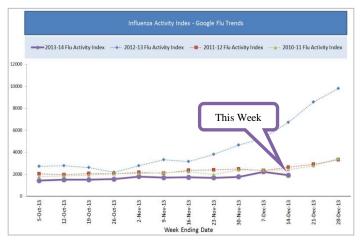
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Community-based Influenza Surveillance (MRITS and Google Flu Trends)

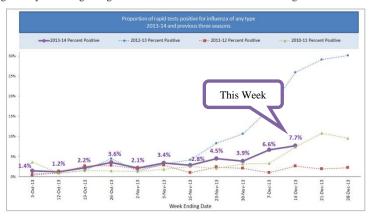
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 612 residents responded to the MRITS survey this week. Of those, 15 (2.5%) reported having ILI and missing a cumulative 32 days of regular daily activities. According to Google Flu Trends, influenza activity is "low" in Maryland.



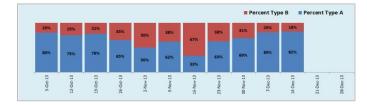


Clinical Laboratory Influenza Testing

Forty clinical laboratories reported performing 1,454 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDT). Of those, 112 (7.7%) were positive for influenza. Of those testing positive, 92 (82.1%) were influenza type A and 20 (17.9%) were influenza type B. The <u>reliability of RIDT</u> depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

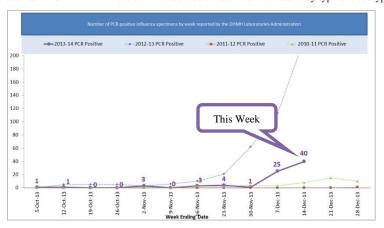


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	92 (82%)	70 (80%)	253 (73%)
Туре В	20 (18%)	18 (20%)	93 (27%)
Total	112 (100%)	88 (100%)	346 (100%)



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 87 PCR tests for influenza. Forty (46.0%) specimens tested positive. Of those, 39 (97.5%) were Type A (H1N1) and one (2.5%) was type A (H3N2). PCR testing is more reliable than RIDT. The DHMH testing identifies subtypes of influenza A, information that is not available from the RIDT results. The table below summarizes results by type and subtype.



Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	39 (98%)	21 (84%)	68 (87%)
Type A (H3)	1 (3%)	2 (8%)	7 (9%)
Type A (H3N2v)			
Туре В		2 (8%)	3 (4%)
Total	40 (100%)	25 (100%)	78 (100%)

Where to get an influenza vaccination

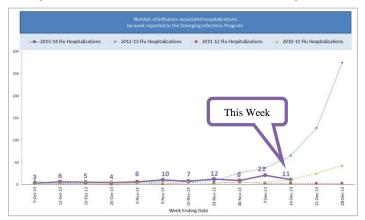
Interested in getting a flu vaccine for the 2013-14 influenza season? Go to http://dhmh.maryland.gov/flumd/SitePages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

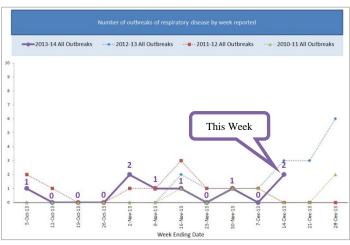
This week, hospitals in Maryland reported 11 influenza-associated hospitalizations. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g. RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



Influenza- Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	1 (9%)	3 (14%)	17 (18%)
Age 5-17	0 (0%)	1 (5%)	5 (5%)
Age 18-24	0 (0%)	2 (10%)	5 (5%)
Age 25-49	4 (36%)	4 (19%)	20 (21%)
Age 50-64	2 (18%)	8 (38%)	21 (22%)
Age ≥ 65	4 (36%)	3 (14%)	26 (28%)
Total	11 (100%)	21 (100%)	94 (100%)

Outbreaks of Respiratory Disease

Two outbreaks of respiratory disease were reported to DHMH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g. from ILI to influenza.)



Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	1 (100%)		2 (25%)
Influenza-like Illness			3 (38%)
Pneumonia	1 (100%)		3 (38%)
Other Respiratory			
Total	2 (100%)		8 (100%)

National Influenza Surveillance (CDC)

- Viral Surveillance: Of 7,294 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 50, 1,301 (17.8%) were positive for influenza.
- O Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- o Influenza-Associated Pediatric Deaths: Two influenza-associated pediatric deaths were reported, one of which occurred during the 2012-13 season.
- Influenza-associated Hospitalizations: A cumulative rate for the season of 3.0 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 2.3%, above the national baseline of 2.0%. Five regions reported ILI at or above region-specific baseline levels. Four states experienced high ILI activity, one state experienced moderate ILI activity; six states and New York City experienced low ILI activity, 37 states experienced minimal ILI activity and the District of Columbia and two states had insufficient data.
- Geographic Spread of Influenza: The geographic spread of influenza in 4 states was reported as widespread; 20 states reported regional influenza activity; 17 states reported local influenza activity; the District of Columbia, Guam, Puerto Rico, and 8 states reported sporadic influenza activity; one state reported no influenza activity, and the U.S. Virgin Islands did not report.

